Discussion of Amendments

The Department proposes to revise Section 1.9 "Definitions"; Section 2.0 "Emission Offset Provisions (EOP)"; and Section 3.0 "Prevention of Significant Deterioration of Air Quality" of 7 DE Admin. Code 1125 Requirements for Preconstruction Review, to conform to the requirements of the EPA PM_{2.5} new source review permitting program. as shown in 73 FR 28321 and 75 FR 64864.

These amendments are required by EPA to allow new source review permitting of qualifying sources of particulate matter with an aerodynamic diameter equal to or less than 2.5 micrometers (PM_{2.5}) and of sources of two precursors of PM_{2.5}, sulfur dioxide and nitrogen oxides.

EPA established air quality standards for PM_{2.5} in 1997. Since then, the standards have been revised and implementation delayed by various court challenges. On May 16, 2008, EPA published a final rule defining the NSR program for PM_{2.5}. This rule set up a transitional permitting program and required SIP approved states to adopt and submit SIP revisions within three years of rule publication; the driving force for this Delaware action.

Currently, New Castle County is designated as non-attainment and Kent and Sussex Counties are designated as in attainment of the applicable National Ambient Air Quality Standard for PM_{2.5}.

Although PM_{2.5} is rather complex, the NSR regulation revisions are simple and straightforward. PM _{2.5} is emitted from a number of sources, particularly combustion sources. PM_{2.5} emissions from a stationary source stack are comprised of a both a filterable fraction (solid particles) and a condensable fraction that remains in a gaseous form due to the heat in the stack exhaust stream, but, condenses into fine particulate matter in ambient air. Both fractions, termed together as direct emissions of PM_{2.5}, must be determined. Any source considered major for direct PM_{2.5} that is newly constructed or subject to a major modification may trigger NSR.

PM_{2.5} also can be generated in the atmosphere through complex reactions of precursor compounds such as sulfur dioxide (SO₂), nitrogen oxides (NO_x), ammonia (NH₃) and volatile organic compounds (VOC), which is referred to as indirect emissions of PM_{2.5}. In Delaware, sulfur dioxide and nitrogen oxides will be considered as precursors. Ammonia and VOC can be considered precursors only if a state demonstrates these are significant contributors to PM_{2.5} formation, a position Delaware has not taken.

Therefore, any source considered major for sulfur dioxide or nitrogen oxides that is newly constructed or subject to a major modification may trigger NSR. Not a new situation for NO_x since the entire state is in non-attainment for ground-level ozone (for which NO_x is already a precursor), but, a new situation for sources emitting sulfur dioxide.

This proposed regulation will be published in the May 1, 2011 Delaware Register of Regulations. The public Hearing will be held starting at 6 pm in the Richardson & Robbins Building auditorium located at 89 Kings Highway in Dover.

Interested parties may view the pertinent documents on this website, at the DNREC Division of Air Quality (DAQ) offices in the Blue Hen Corporate Center, Suite 5N, 655 South Bay Road, Dover, DE 19901 (please call 302-739-9402 for appointment) or at the DAQ offices at 715 Grantham Lane, New Castle, DE 19720 (please call 302-323-4542 for an appointment).

The proposed regulation can be seen on the Delaware Register of Regulations website http://regulations.delaware.gov/services/register.shtml on May 1, 2011, or on this website (see below).

Interested parties may submit comments on the proposed regulation at the Hearing or to Gene Pettingill 715 Grantham Lane, New Castle, DE 19720 or by email (gene.pettingill@state.de.us) on any of these proposed amendments during the comment period, which will extend through May 30, 2011, or a longer period if so designated by the hearing officer at the public hearing. It is requested that those interested in presenting statements at the public hearing register in advance.

Anyone having questions should call (or email) Gene Pettingill at 302-323-4542.